

A Cup of Health with CDC

December 15, 2006

A Comprehensive Immunization Strategy to Eliminate Transmission of HBV in the US

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

[Matthew Reynolds] Welcome to A Cup of Health with CDC, a weekly broadcast of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Matthew Reynolds.

Each year, Hepatitis B kills about 700,000 people worldwide. In the past twenty years in the U.S., there has been a growing awareness of the impact of hospitalizations, cancers, and deaths that have resulted from Hepatitis B. The virus that causes Hepatitis B is often spread at birth from mother to child. It can also be spread among adults during unprotected sex and as a result of blood exposure during health care or from certain behaviors, such as injection-drug use. The virus can scar or destroy liver tissue and lead to liver failure and liver cancer.

Fortunately, a vaccination program for infants started more than twenty years ago. This has led to a drop in new Hepatitis B cases in the past ten years, especially in children and teens. However similar declines have not occurred among adults because many adults at risk for this infection remain unvaccinated.

To protect more adults from Hepatitis B, CDC researchers have updated the Hepatitis B immunization recommendations for adults. Here to discuss these recommendations and tell us more about Hepatitis B is Dr. John Ward from CDC's Division of Viral Hepatitis

Thanks so much for joining us, Dr. Ward.

[Dr. Ward] Thanks, Matthew. It's great to be here.

[Matthew Reynolds] What can be done to prevent Hepatitis B?

[Dr. John Ward] Fortunately, we have a variety of interventions that are very effective in preventing this deadly viral infection. We, in this country, screen the blood supply so that blood donations that harbor this virus are eliminated from the transfusion pool before recipients receive them. We have issued recommendations so that people understand the behaviors that lead to transmission of Hepatitis B. These behaviors are very similar to the behaviors that transmit HIV, which include unprotected sexual contact and exposure to blood, in some of the ways that you mentioned. But particularly it's particularly important for persons in certain occupations like health-care workers and persons who practice certain behaviors such as injecting-drug use. But the subject today is really to emphasize probably the most important and effective intervention we have for this infection, which is vaccination. We've had a vaccine for over 25 years now and we have made remarkable progress in preventing this infection because of the availability of this vaccine.

[Matthew Reynolds] Well, how safe is this vaccine and does it work?

[Dr. John Ward] The Hepatitis B vaccine is very safe. We've had a Hepatitis B vaccine licensed for use in the United States since 1981, so we have a long experience in using it, and it's demonstrated itself to be very safe. In addition, it's also very effective. In fact, for persons who receive all three doses, which are the number of doses recommended for the full series, 95 percent of them will be protected from infection with this virus. It's fantastic in public health when you have an intervention that is so safe, as well as so effective, that you can recommend it for use by millions of people.

[Matthew Reynolds] Well, you mentioned millions of people. Are there specific groups or populations that you have in mind that should be vaccinated against Hepatitis B?

[Dr. John Ward] In 1991, CDC embarked upon a goal to eliminate Hepatitis B transmission in the United States. And the first order of business was to protect infants who were being born to mothers who were infected with this virus because of their high risk of developing chronic Hepatitis B themselves. And so, beginning at that time, all children were recommended to receive this vaccine as infants, and then progressively since that time, older children and teenagers were recommended to receive this vaccine as a catch-up strategy so that those children would also be protected even though that vaccine was not available earlier in their lives. Throughout that time period, adults who had the behaviors that we've been discussing have also been recommended to receive this vaccine. So, specifically, adults who have sexual activity with multiple partners, particularly behaviors that result in unprotected sexual contact, adults who have exposures to blood by virtue of their occupation, such as health-care workers or public safety workers, or have certain behaviors, such as injecting-drug use, that put them in contact with the blood of others. And then, also, family members of persons with chronic Hepatitis B, because even incidental contact through activities such as contact with toothbrushes or shaving razors and that type of thing will also result in transmission, so those close persons with close contact should also be vaccinated. Unfortunately, the vaccination coverage has remained low for these groups throughout this time period and so these new recommendations are designed to change that and protect more adults from becoming infected.

[Matthew Reynolds] Well, if I go to my doctor, do I have to talk about the reason I think I'm at risk for Hepatitis B infection in order to receive the vaccination?

[Dr. John Ward] We do not recommend that that is a requirement for a person to receive Hepatitis B vaccine as an adult. We're encouraging physicians to bring up these risk behaviors with their patients because, not only are they risk behaviors for Hepatitis B, but they're also risk behaviors for other important infections, such as syphilis or HIV, and those are important to address as well. But we also recognize that adults may not want to share this information with their physicians for whatever reason, and we certainly do not want that to be a barrier to adults receiving the vaccine who really need it. And so we are very emphatic and very clear when we say is that all an adult really has to do to receive this vaccine is go to their physician and ask for it.

[Matthew Reynolds] What about those people who already have Hepatitis B? Is there anything that can be done for them?

[Dr. John Ward] Fortunately, persons with chronic Hepatitis B have treatment options that were not available even several years ago. CDC estimates that between one and one and a half million persons in this country are living with chronic Hepatitis B, placing them at risk for progression to liver failure, cirrhosis, and even liver cancer. So it's very important for those persons to be diagnosed with their infection and then to be referred for treatments, which have been shown to reverse the severe consequences of liver disease and provide hope that persons with chronic infection can live a full life in spite of this infection. Diagnosing persons with chronic Hepatitis B provides another opportunity to identify those around them who are unvaccinated and at risk for becoming infected, and bringing them in and vaccinating them so that they don't unknowingly transmit infection to others.

[Matthew Reynolds] Dr. Ward, thanks for talking with us today.

[Dr. John Ward] Thank you very much.

[Matthew Reynolds] That's it for this week's show. Don't forget to join us next week. Until then, be well. This is Matthew Reynolds for A Cup of Health with CDC.

[Announcer] To access the most accurate and relevant health information that affects you, your family, and your community, please visit www.cdc.gov.